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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/550,595	06/22/2006	Takahiro Nagaoka	033010-107	1363
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EXAMINER				
BONK, TERESA				
ART UNIT		PAPER NUMBER		
3725				
NOTIFICATION DATE		DELIVERY MODE		
03/24/2009		ELECTRONIC		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

ADIPFDD@bipc.com

### Office Action Summary

**Application No.**

10/550,595

**Applicant(s)**

NAGAOKA ET AL.

**Examiner**

TERESA BONK

**Art Unit**

3725

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 05 December 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 15-34 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 15-34 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/CDC)
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date: \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_
- Paper No(s)/Mail Date: \_\_\_\_\_

## **DETAILED ACTION**

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 15-34 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The claims are indefinite because they state that the “second detecting apparatus counts...” which is not entirely factual. According to the specification, the sensor itself is not disclosed as being capable of a counting routine; the control circuit counts in response to the sensed conditions. The specification states on page 21, “The control circuit starts counting the pulses to detect the protrusion (first -to-be-detect portion) 65 (step 106)” and on page 22, “Thus, the control circuit counts the number of the marks 53 (step 110).”

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 15, 19, 23, and 31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ishikawa et al. (US Patent 6,401,766), previously presented, in view of Obata et al. (US Patent

6,338,263), newly cited. Ishikawa discloses a reinforcing bar binder comprising a storing chamber (105 or 205) provided in a main body of the reinforcing bar binder for mounting a wire reel (106 or 206) around which a wire (b) for binding a reinforcing-bar (a) is wound (Column 6, lines 9-11), the wire being twisted for binding the reinforcing bar after it is wound around the reinforcing bar. Ishikawa also discloses contact-type detectors (117) that detect convex portions (116).

Ishikawa discloses the invention substantially as claimed except for providing a first to-be-detected portion and a second to-be-detected portion on a wire reel; detecting the first to-be-detected portion with a first detecting apparatus to detect an amount of rotation of the wire reel; and counting the second to-be-detected portion with a second detecting apparatus during rotation of the wire reel to detect a type of the wire reel.

Obata is relied upon to teach a rotating apparatus, similar to the action of a wire reel, that provides a first to-be-detected portion (mark 17a) and a second to-be-detected portion (mark 17a) on the apparatus (11); detecting the first to-be-detected portion with a first detecting apparatus (151) to detect an amount of rotation of the apparatus; and counting the second to-be-detected portion with a second detecting apparatus (152) during rotation of the apparatus to detect the type apparatus (Column 9, lines 5-35). Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide to-be-detected portions and corresponding detecting apparatuses because applying a known technique to a known device ready for improvement yields predictable results.

Claims 17, 20, 27, and 34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ishikawa et al. in view of Obata et al. and Hanagasaki et al. (US Patent 5,515,887), previously presented. The combination of Ishikawa and Obata discloses the invention substantially as claimed except for a non-contact type sensor. Hanagasaki is relied upon to teach a wire reel (3) have detecting means including a non-contact, optical sensor (22). Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide a non-contact sensor because combining prior art elements according to known method yields predictable results.

#### ***Allowable Subject Matter***

Claims 16, 18, 21, 22, 24, 25, 26, 28, 29, 30, 32, 33 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

#### ***Response to Arguments***

In the Office Action mailed August 22, 2008 the following paragraph was listed: "Claims 3-4 and 12-13 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims."

The Applicant states in the remarks, filed December 5, 2008, that in the newly submitted claims: "The subject matter of canceled claim 3 is incorporated into new independent claims 15, 23 and 31. Similar features are incorporated into new independent claim 19. Independent claims 15, 19, 23 and 31 are not identical to claims 3 and 12 which the Examiner has indicated contain allowable subject matter. However, Applicants submit that claims 15, 19, 23 and 31 are allowable for the reasons that rendered claims 3 and 12 allowable. It is also submitted that independent claims 15, 19, 23 and 31 and their respective dependent claims are allowable for the reasons set forth below."

The Examiner points out that the newly submitted claims 15-34 include a new "counting" limitation not found in the previously rejected claims 1-14 and although new claims 15-34 share similar aspects of canceled claims 1-14 the scope of the claims has changed. Therefore, Applicant's arguments, filed on December 5, 2008, with respect to the previous 103 rejection (Ishikawa in view of Hanagasaki) have been considered but are moot in view of the new ground(s) of rejection.

### ***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after

the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to TERESA BONK whose telephone number is (571)272-1901. The examiner can normally be reached on Monday-Friday 9:00-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dana Ross can be reached on 571-272-4480. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Dana Ross/  
Supervisory Patent Examiner, Art Unit 3725

Teresa M. Bonk  
Examiner  
Art Unit 3725